

Western Health District (Androscoggin, Franklin and Oxford Counties)
Burden of Injury
2005-2009

Highlights

Injury Deaths^a

- Injury was the underlying cause of death for 9,606 residents during this five year time period. There was an average of 1,921 injury deaths per year.
- The average annual injury death rate was 60.5 per 100,000 Western Health District residents.
- Injury was the underlying cause for 6.1 of all deaths among Western Health District residents.
- 73.2% of injury deaths were due to unintentional causes; 24.4% were due to intentional causes; 2.4% were coded as either undetermined intent or other.
- The three leading causes of injury deaths were unintentional motor vehicle traffic, suicide and unintentional poisoning.

Injury Hospital Discharges^b

- There were 6,184 hospital discharges of Western Health District residents for which an injury was the principal diagnosis during this 5 year period. There was an average of 1,236 such discharges per year. 5.1% of hospital discharges were for an injury related cause.
- The average annual injury hospital discharge rate was 638.5 per 100,000 Western Health District residents. Western Health District residents aged 65+ years were significantly more likely to have a hospital discharge than were residents in other age groups.
- The injury hospital discharge rate for females (653.8 per 100K) was higher than the rate for males (622.5 per 100K).
- 86.4% of injury hospital discharges were known to be due to unintentional causes; 9.5% were known to be due to intentional causes; 4.1% of injury cases were coded for undetermined, other or intent.
- The three leading causes of injury hospital discharges were unintentional fall, unintentional motor vehicle traffic, and intentional self injury.

Injury Outpatient Emergency Department Visits^c

- There were 128,274 outpatient emergency department visits for which an injury was the principal diagnosis during this 5 year period. There was an average of 25,658 visits per year. 25.4% of outpatient emergency department visits were for an injury related cause.
- The average annual injury outpatient emergency department visit rate was 13,244.2 per 100,000 residents. Teens and young adults ages 15-24 were significantly more likely to have an injury outpatient visit than were people in other age groups.
- The injury outpatient emergency department visit rate for males (14,810.0 per 100K) was significantly higher than the rate for females (11,753.5 per 100K).
- 92.0% of injury outpatient emergency department visits were known to be due to unintentional causes; 3.5% were known to be due to intentional causes; 4.5% of injury cases were not coded for intent.
- The three leading causes of injury outpatient emergency department visits were unintentional fall, unintentional struck by/against, and unintentional overexertion.

a Injury deaths defined as underlying cause of death coded as ICD-10 V01-Y36, Y85-Y87, Y89, U01-U03, Y40-Y59, Y60-Y84, or Y88

b Hospital discharge with injury principal diagnosis defined as principal diagnosis coded as ICD-9-CM 800-909.2, 909.4, 909.9-994.9, 995.5-995.59 or 995.80-995.85

c Outpatient emergency department visit with injury principal diagnosis defined as principal diagnosis coded as ICD-9-CM 800-909.2, 909.4, 909.9-994.9, 995.5-995.59 or 995.80-995.85, and discharge status coded as "Discharged to home or self care (routine discharge)" or "Discharged/transferred to home under care of organized home health service organization".

**Five Leading Causes of Injury Deaths
Western Health District, 2005-2009**

Rank	Overall		Age <15	Age 15-24	Age 25-44	Age 45-64	Age 65+		Male	Female
1	Unintentional Motor Vehicle Traffic 135		Unintentional Suffocation 5	Unintentional Motor Vehicle Traffic 36	Unintentional Poisoning 46	Suicide 47	Unintentional Fall 63		Unintentional Motor Vehicle Traffic 92	Unintentional Motor Vehicle Traffic 43
2	Suicide 118		Unintentional Transport, Land 3	Suicide 12	Unintentional Motor Vehicle Traffic 36	Unintentional Poisoning 36	Unintentional Unspecified 41		Suicide 88	Unintentional Poisoning 35
3	Unintentional Poisoning 93		Unintentional Motor Vehicle Traffic 2	Unintentional Poisoning 7	Suicide 34	Unintentional Motor Vehicle Traffic 28	Unintentional Motor Vehicle Traffic 33		Unintentional Poisoning 58	Unintentional Unspecified 31
4	Unintentional Fall 77			Unintentional Other, transport 5	Homicide 10	Unintentional Suffocation 9	Suicide 25		Unintentional Fall 47	Unintentional Fall 30
5	Unintentional Unspecified 44			Homicide 3	Unintentional Fall 5	Unintentional Fall 8	Unintentional Suffocation 9		Unintentional Suffocation 15	Suicide 30

**Five Leading Causes of Injury Hospitalizations
Western Health District, 2005-2009**

Rank	Overall		Age <15	Age 15-24	Age 25-44	Age 45-64	Age 65+		Male	Female
1	Unintentional Fall 3,181		Unintentional Fall 133	Unintentional Motor Vehicle Traffic 184	Unintentional Motor Vehicle Traffic 235	Unintentional Fall 620	Unintentional Fall 2,124		Unintentional Fall 1,194	Unintentional Fall 1,987
2	Unintentional Motor Vehicle Traffic 784		Unintentional Motor Vehicle Traffic 34	Intentional Self Injury 110	Unintentional Fall 229	Unintentional Motor Vehicle Traffic 201	Unintentional Unspecified 141		Unintentional Motor Vehicle Traffic 491	Unintentional Motor Vehicle Traffic 293
3	Intentional Self Injury 448		Unintentional Transport, Other 26	Unintentional Fall 75	Intentional Self Injury 189	Intentional Self Injury 127	Unintentional Motor Vehicle Traffic 130		Intentional Self Injury 189	Intentional Self Injury 259
4	Unintentional Poisoning 268		Unintentional Struck By/Against 21	Unintentional Transport, Other 55	Unintentional Transport, Other 68	Unintentional Poisoning 85	Unintentional Poisoning 63		Unintentional Transport, Other 170	Unintentional Poisoning 148
5	Unintentional Transport, Other 230		Unintentional Poisoning 20	Unintentional Poisoning 36	Unintentional Poisoning 64	Unintentional Transport, Other 55	Unintentional Overexertion 50		Unintentional Poisoning 120	Unintentional Unspecified 127

**Five Leading Causes of Injury Emergency Department Visits
Western Health District, 2005-2009**

Rank	Overall		Age <15	Age 15-24	Age 25-44	Age 45-64	Age 65+		Male	Female
1	Unintentional Fall 33,087		Unintentional Fall 7,930	Unintentional Struck by/against 5,191	Unintentional Fall 6,956	Unintentional Fall 6,601	Unintentional Fall 6,931		Unintentional Fall 15,515	Unintentional Fall 17,572
2	Unintentional Struck by/against 18,564		Unintentional Struck by/against 5,533	Unintentional Fall 4,669	Unintentional Overexertion 6,014	Unintentional Overexertion 2,936	Unintentional Overexertion 865		Unintentional Struck by/against 11,481	Unintentional Overexertion 7,765
3	Unintentional Overexertion 15,546		Unintentional Overexertion 2,019	Unintentional Overexertion 3,712	Unintentional Struck by/against 4,746	Unintentional Cut/pierce 2,599	Unintentional Struck by/against 850		Unintentional Cut/pierce 8,148	Unintentional Struck by/against 7,083
4	Unintentional Cut/pierce 12,224		Unintentional Cut/pierce 1,859	Unintentional Motor vehicle traffic 2,850	Unintentional Cut/pierce 4,142	Unintentional Struck by/against 2,245	Unintentional Unspecified 839		Unintentional Overexertion 7,781	Unintentional Motor vehicle traffic 4,766
5	Unintentional Motor vehicle traffic 8,880		Unintentional Other, specified 1,624	Unintentional Cut/pierce 2,805	Unintentional Motor vehicle traffic 3,148	Unintentional Motor vehicle traffic 1,802	Unintentional Cut/pierce 819		Unintentional Other Specified 4,325	Unintentional Cut/pierce 4,076

Maine Injury Prevention Program – Four Priority Injury Indicators
Injury Deaths
Western Health District, 2005-2009

Overall		Age <15	Age 15-24	Age 25-44	Age 45-64	Age 65+		Male	Female
Unintentional Motor Vehicle Traffic 135		Unintentional Motor Vehicle Traffic 2	Unintentional Motor Vehicle Traffic 36	Unintentional Poisoning 46	Suicide 47	Unintentional Fall 63		Unintentional Motor Vehicle Traffic 92	Unintentional Motor Vehicle Traffic 43
Suicide 118		Unintentional Fall 1	Suicide 12	Unintentional Motor Vehicle Traffic 36	Unintentional Poisoning 36	Unintentional Motor Vehicle Traffic 33		Suicide 88	Unintentional Poisoning 35
Unintentional Poisoning 93			Unintentional Poisoning 7	Suicide 34	Unintentional Motor Vehicle Traffic 28	Suicide 25		Unintentional Poisoning 58	Unintentional Fall 30
Unintentional Fall 77				Unintentional Fall 5	Unintentional Fall 8	Unintentional Poisoning 3		Unintentional Fall 47	Suicide 30

Maine Injury Prevention Program – Four Priority Injury Indicators
Injury Hospitalizations
Western Health District, 2005-2009

Overall		Age <15	Age 15-24	Age 25-44	Age 45-64	Age 65+		Male	Female
Unintentional Fall 3,181		Unintentional Fall 133	Unintentional Motor Vehicle Traffic 184	Unintentional Motor Vehicle Traffic 235	Unintentional Fall 620	Unintentional Fall 2,124		Unintentional Fall 1,194	Unintentional Fall 1,987
Unintentional Motor Vehicle Traffic 784		Unintentional Motor Vehicle Traffic 34	Intentional Self Injury 110	Unintentional Fall 229	Unintentional Motor Vehicle Traffic 201	Unintentional Motor Vehicle Traffic 130		Unintentional Motor Vehicle Traffic 491	Unintentional Motor Vehicle Traffic 293
Intentional Self Injury 448		Unintentional Poisoning 20	Unintentional Fall 75	Intentional Self Injury 189	Intentional Self Injury 127	Unintentional Poisoning 63		Intentional Self Injury 189	Intentional Self Injury 259
Unintentional Poisoning 268		Intentional Self Injury 11	Unintentional Poisoning 36	Unintentional Poisoning 64	Unintentional Poisoning 85	Intentional Self Injury 13		Unintentional Poisoning 120	Unintentional Poisoning 148

Maine Injury Prevention Program – Four Priority Injury Indicators
Injury Emergency Department Visits
Western Health District, 2005-2009

Overall		Age <15	Age 15-24	Age 25-44	Age 45-64	Age 65+		Male	Female
Unintentional Fall 33,087		Unintentional Fall 7,930	Unintentional Fall 4,669	Unintentional Fall 6,956	Unintentional Fall 6,601	Unintentional Fall 6,931		Unintentional Fall 15,515	Unintentional Fall 17,572
Unintentional Motor vehicle traffic 8,880		Unintentional Motor vehicle traffic 553	Unintentional Motor vehicle traffic 2,850	Unintentional Motor vehicle traffic 3,148	Unintentional Motor vehicle traffic 1,802	Unintentional Motor vehicle traffic 527		Unintentional Motor vehicle traffic 4,114	Unintentional Motor vehicle traffic 4,766
Unintentional Poison 972		Unintentional Poison 284	Intentional Self Injury 308	Intentional Self Injury 331	Unintentional Poison 173	Unintentional Poison 105		Unintentional Poison 490	Intentional Self Injury 487
Intentional Self Injury 918		Intentional Self Injury 49	Unintentional Poison 174	Unintentional Poison 236	Intentional Self Injury 88	Intentional Self Injury 10		Intentional Self Injury 431	Unintentional Poison 482

Data Sources

Deaths: 2005-2009 death certificate statistical datasets obtained from the Office of Data, Research and Vital Statistics, Maine analysis includes all deaths to Maine residents, regardless of the state where the death occurred.

Hospital Discharges: 2005-2009 hospital discharge (inpatient) datasets obtained from the Maine Health Data Organization. Analysis limited to discharge of Maine residents from Maine acute care hospitals (excludes psychiatric, rehabilitation and federal hospitals)

Outpatient ED Visits: 2005-2009 hospital outpatient datasets obtained from the Maine Health Data Organizations. Analysis limited to ED visits by Maine residents at Maine acute care hospitals (excludes psychiatric, rehabilitation and federal hospitals) where the person was discharged to home or self care.

Population Estimates: Annual estimates of the resident population by age, sex, race and Hispanic origin for counties: April 1, 2000 to July 1, 2009.

Injury Definitions

Unintentional Injury	Definition
Fall	When an individual sustains an injury after an unintentional descent from any height
Motor Vehicle	An incident involving a motorized vehicle and at least one injured individual, where that individual is a vehicle occupant, passenger or driver; a motorcyclist
Pedestrian	Injuries caused in transport and non-transport related crashes
Transport, Other	All transportation injuries not included in motor vehicle, pedestrian or bicycle injuries
Fire/Hot Substance	Severe exposure to flames, heat, chemicals or hot substance that leads to tissue damage of the skin or places deeper in the body; injury from smoke inhalation to the upper airway, lower airway or lungs
Firearm	Penetrating force injury resulting from a bullet or other projectile shot from a powder charged gun (handgun, shotgun, unspecified firearm)
Poisoning	Ingestion, inhalation, absorption through the skin, or injection of so much of a drug, toxin, or other chemical that a harmful effect results. This category does not include harmful effects from normal therapeutic drugs or bacterial illnesses
Suffocation	Inhalation, aspiration or ingestion of food or other object that blocks the airway or causes suffocation; intentional or accidental mechanical suffocation caused by hanging, strangulation, lack of air in a closed place, plastic bag, or falling earth. This category does not include injury resulting from a foreign body that does not block the airway.
Natural/Environmental Causes	Injury resulting from exposure to adverse natural and environmental conditions, i.e. severe heat, severe cold, lightning, sunstroke, tornadoes and natural disasters as well as lack of food or water.
Struck By/Against	Injury resulting from being struck by (i.e. hit) or crushed by a human, animal, or inanimate object or force other than a vehicle or machinery; injury caused by striking (i.e. hitting) against a human, animal or inanimate object or force other than a vehicle or machinery
Cutting/Piercing	Injury resulting from an incision, slash, perforation or puncture by a pointed or sharp instrument, weapon or object
Overexertion	Injury resulting from excessive physical exercise (i.e. lifting, pulling, pushing). Strenuous movements in recreational and other activities
Drowning	Suffocation resulting from submersion in water or other liquid
Late effects	Late effect or sequela resulting from a previous injury or poisoning

Unspecified	Information missing on mechanism (.i.e. motor vehicle, firearm, hanging) of the injury
Other	Injury associated with any other specified cause that does not fit another category
Intentional Injury	Definition
Abuse and Neglect	Injury resulting from abuse or criminal neglect
Physical Force	Injury resulting from fight, brawl, rape, includes beating with hands, fists, feet
Cutting/Piercing	Injury resulting from an incision, a slash, a perforation, or a puncture by a pointed or sharp instrument, weapon or object
Firearm	Penetrating force injury resulting from a bullet or other projectile shot from a powder charged gun (handgun, shotgun, military firearm, unspecified firearm)
Homicide	All fatal injuries purposely inflicted by other persons, excluding legal intervention by law enforcement agents
Struck	Injury resulting from striking by blunt or thrown object
Other	Injury associated with any other specified cause that does not fit another category
Self Injury	Definition
Drug and Medicinal Substances	Injury resulting from poisoning by drug and medicinal substances (i.e. analgesics, barbiturates, tranquilizers, etc)
Cutting/Piercing	Injury resulting from cutting, piercing instrument
Firearm	Penetrating force injury resulting from bullet or other projectile shot from a powder charged gun
Jump	Injury resulting from jumping from high places
Hang	Mechanical suffocation caused by hanging or strangulation or physical constriction of the neck, resulting in air loss
Suicide	All fatal injuries which are self inflicted
Other	Injury associated with any other specified cause that does not fit another category
Undetermined Intent	Definition
Poisoning	Injury resulting from poisoning by solid or liquid substance, including drugs and medicinal substances but undetermined whether unintentionally or intentionally inflicted
Unspecified	Information missing on mechanism (i.e., motor vehicle, firearm, hanging) of the injury

